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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/982,510 | 10/17/2001 | David Thompson | BRDC:038 | 8112 |

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| EXAMINER | |
|---|---|
| PHAN, JOSEPH T | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2614 | |

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/982,510 | THOMPSON ET AL. | |
| | Examiner | Art Unit | |
| | Joseph T. Phan | 2614 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *15 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-11 and 13-30* is/are rejected.

7)☒ Claim(s) *4 and 12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 line 10 recites "identifying each of the at least one data payload". This phrase is unclear and confusing as the term 'each' suggests there are multiple payloads which is not recited in the claim. The claim recites one payload in line 2 and therefore it is not known if this phrase is referring to the one payload or multiple payloads. Appropriate clarification and/or correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-3, 5-11, and 13-20 rejected under 35 U.S.C 102(e) as being anticipated by Abrol, Patent # 6507582.**

Regarding claim 1, Abrol teaches a wireless communications network for communicating at least one data payload, comprising.

a wired network, a wireless channel, a server computer connected to the wired network,

a wireless packetized data communications provider equipment connected to the wired network(Fig.5),

a client device communicatively connected via the wireless channel to the wireless packetized data communications provider(Fig.5);

a respective global sequence number identifying each of the at least one data payload, the respective global sequence number being assigned by the server computer to each data payload and included by the server computer in at least one data packet comprising the data payload *Fig.6-7, col.3 lines 24-51, col.12 line 64-col.13 line 16)*; and each of the respective at least one data payload is communicated on the wireless channel(506 Fig.5) together with the respective global sequence number*(Fig.1,Fig.6-7, col.3 lines 24-51, col.12 line 64-col.13 line 16).*

Regarding claim 2, Abrol teaches the wireless commlmications network of claim 1, further comprising a detector for determining whether any payload has not been received by the client device by means of the global sequence number*(col.6 line 59-col.7 line 36)*

Regarding claim 3, Abrol teaches the wireless communications network of claim 2, wherein the detector is selected from the group consisting of: a software and a hardware of the client device(Fig.5)

Regarding claim 4, Abrol, due to the 112 rejection above, teaches the wireless communications network of claim 3, wherein the first client device communicates to the server computer an identifier of any payload that is not received by the client device, based on the global sequence number*(col.6 line 59-col.7 line 36)*

Regarding claim 5, Abrol teaches the wireless communications network of claim 2, wherein the wired network is the Internet(col.1 lines 42-54).

Regarding claim 6, Abrol teaches the wireless communications network of claim 1, wherein the wireless channel is a cellular packetized data system(*col.3 lines 24-51).*

Regarding claim 7, Abrol teaches the wireless communications network of claim 1, wherein the wireless channel is a CDPD system(*col.3 lines 24-51).*

Regarding claim 8, Abrol teaches the wireless communications network of claim 1, further comprising a compressor for compressing together headers of each payload(*Fig.1-2; the headers are "compressed"/shortened).*

Regarding claim 9, Abrol teaches the wireless communications network of claim 8, wherein the compressor is the server computer(*Fig.5)*

Regarding claim 10, Abrol teaches the wireless communications network of claim 1, further comprising a comparator for determining whether a time differential between receipts by the client device of every other sequential payload exceeds a time constant indicative of an effective data receipt rate of the client device(Fig.1-2)

Regarding claim 11, Abrol teaches the wireless communications network of claim 10, wherein the comparator is selected from a group consisting of: a software and a hardware at the client device(Fig.5).

Regarding claim 12, Abrol, due to the 112 rejection above, teaches the wireless communications network of claim 10, wherein the client device assumes any payload loss occurs on the wire side if the time differential does not exceed a multiple of an effective data transmit rate of the server computer and otherwise on the wired side(Fig.4).

Regarding claim 13, Abrol teaches the wireless communications network of claim 1, further comprising:

a compressor for compressing together all data headers of payloads of information at the server computer (*Fig.1-2).*

Regarding claim 14, Abrol teaches the wireless communications network of claim 13, further comprising:

a transmitter at the server computer for transmitting the compressed data headers of payloads(*Fig.1-2 and Fig.4).*

Regarding claim 15, Abrol teaches the wireless communications network of claim 1, further comprising:

a bundling rate determiner at the client device, wherein an outstanding number of bytes not yet received by the client device is divided by an effective data receipt rate of the client device, and the server computer adjusts a send rate of the server computer based on a multiple of the result of the division*(Fig.1,Fig.5-7, col.3 lines 24-51, col.12 line 64-col.13 line 16).*

**Regarding claim 16, Abrol** teaches a method of wireless communications, comprising the step of:

assigning at least one payload a respective global sequence number;
including the respective global sequence number in at least one data packet comprising each data payload; and transmitting the at least one data payload together with the global sequence number*(Fig.1,Fig.5-7, col.3 lines 24-51, col.12 line 64-col.13 line 16).*

Regarding claim 17, Abrol teaches the method of claim 16, further comprising: receiving each of next successive payloads, determining a time differential between receipts of the next successive payloads;
comparing the time differential to a multiple of a server transmit rate;
wherein if the time differential exceeds the multiple then payload loss is assumed occurring on a wireless portion of a network and otherwise on a wired portion of the network*(Fig.1,Fig.5-7, col.3 lines 24-51, col.12 line 64-col.13 line 16).*

**Regarding claim 18, Abrol** teaches a method of wireless communications, comprising the step of:
compressing together all headers of each payload of information at the server computer*(Fig.1,Fig.5-7, col.3 lines 24-51, col.12 line 64-col.13 line 16).*

Regarding claim 19, Abrol teaches the method of claim 18, further comprising the step of transmitting together all headers as so compressed*(Fig.1,Fig.5-7, col.3 lines 24-51, col.12 line 64-col.13 line 16).*

Regarding claim 20, Abrol teaches a method of wireless communications, comprising the steps of: determining at a client device the number of bytes outstanding not yet received, dividing the number of bytes by an effective receipt data rate of the client device; and varying a send rate of a server computer according to a multiple of

the result of the step of dividing*(Fig.1,Fig.5-7, col.7 line 24-col.8 line 42, col.3 lines 24-51, col.12 line 64-col.13 line 16).*

**4. Claims 18 rejected under 35 U.S.C 102(e) as being anticipated by Birdwell, et al., Patent #6,032,197.**

**Regarding claim 18, Birdwell** teaches a method of wireless communications, comprising the step of:

compressing together all headers of each payload of information at the server computer *(Fig.8 and col.8 lines 56-67).*

***Response to Arguments***

5. Applicant's arguments filed 12/15/2005 have been fully considered but they are not persuasive. In response to applicant's argument, in view of Abrol, that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., *the data payload is not the frame transmitted over an RLP air interface*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding claim 18, Fig.8 of Birdwell discloses compressing together all headers of at least one payload of information at the server computer. It is noted that examiner reserves the right to use other line references in each prior art of record to read onto the claims since they can be broadly interpreted in light of the specification.

### *Allowable Subject Matter*

6. Claims 4 and 12 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4 and 12 should not be assumed to be allowable alone or inserted into other claim variations not mentioned above.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph T. Phan whose telephone number is (571) 272-7544. The examiner can normally be reached on Mon-Fri 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTP
March 31, 2006 JTP

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